

EXHIBIT R

EXHIBIT 14

Entropic Communications, LLC v. Comcast Corp., et al.
Case 2:23-cv-01050-JWH-KES (C.D. Cal.)

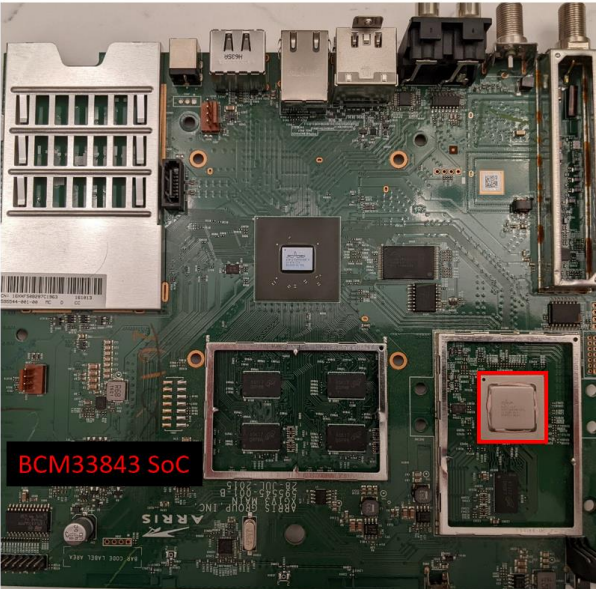
U.S. Patent No. 11,381,866 (the “’866 Patent”) Exemplary Infringement Chart

Comcast operates and maintains a nationwide television and data network through which it sells, leases, and offers for sale products and services, including the Technicolor TC8717 cable modem, Technicolor CGM4140 cable modem, Technicolor CGM4331 cable modem, and products that operate in a similar manner (“Accused Cable Modem Products”), as well as the Arris AX013ANC STB, Arris AX013ANM STB, Arris AX014ANC STB, Arris AX014ANM STB, Arris MX011ANC STB, Arris MX011ANM STB, Pace PX013ANC STB, Pace PX013ANM STB, Pace PX022ANC STB, Pace PX022ANM STB, Samsung SX022ANC STB, Samsung SX022ANM STB, and products that operate in a similar manner (“Accused Set Top Products”). Comcast provides cable television and internet services (“Accused Services”) via the lease, sale, and/or distribution of the Accused Cable Modem Products and/or the Accused Set Top Products. Comcast literally and/or under the doctrine of equivalents infringes the claims of the ’866 Patent by making, using, selling, offering for sale, and/or importing the Accused Services, Accused Cable Modem Products, and/or the Accused Set Top Products.

As shown below in the chart with exemplary support, the Accused Services infringe at least claims 27, 28, 33, 36, 37, 41, 42, 47, 50, and 51 of U.S. Patent No. 11,381,866 (“’866 Patent”). The ’866 Patent was filed January 28, 2022, issued July 5, 2022, and is entitled “Cable Television Device.” The ’866 Patent claims priority to U.S. Patent Application Serial No. 17/217,244, filed on Mar. 30, 2021; U.S. Patent Application Serial No. 16/430,506, filed on Jun. 4, 2019; U.S. Patent Application Serial No. 15/792,318, filed Oct. 24, 2017; U.S. Patent Application Serial No. 14/948,881, filed Nov. 23, 2015, U.S. Patent Application Serial No. 14/617,973, filed on Feb. 10, 2015; U.S. Patent Application Serial No. 13/962,871, filed on August 8, 2013; U.S. Patent Application Serial No. 12/762,900, filed on April 19, 2010; and U.S. Provisional Patent Application No. 61/170,526, filed April 17, 2009.

The Accused Services utilize the claimed device, for example, the Accused Set Top Products. The Accused Set Top Products infringe the claims of the ’866 Patent, as described below, either directly under 35 U.S.C. § 271(a), or indirectly under 35 U.S.C. §§ 271(b)–(c).

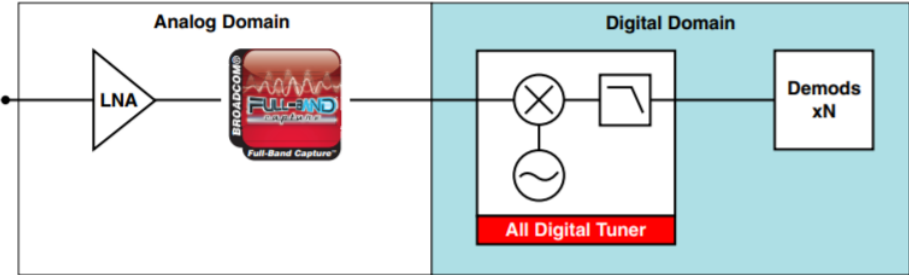
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#	U.S. Patent No. 11,381,866	Accused Products and Services
27pre	27. A cable television (TV) device comprising:	The Accused Services utilize the claimed cable TV device by using, for example, the Accused Set Top Products, which include at least one set top box (“STB”) located at each sub-scriber location, including, for example, the Arris AX013ANC STB, Arris AX013ANM STB, Arris AX014ANC STB, Arris AX014ANM STB, Arris MX011ANC STB, Arris MX011ANM STB, Pace PX013ANC STB, Pace PX013ANM STB, Pace PX022ANC STB, Pace PX022ANM STB, Samsung SX022ANC STB, Samsung SX022ANM STB, and products that operate in a similar manner. By way of example, the Arris AX013ANM is charted herein.
27a	a wideband analog-to-digital converter (ADC) configured to digitize a contiguous band of frequencies in an input signal, wherein the contiguous band of frequencies comprises a plurality of desired channels and a plurality of undesired channels;	<p>The Accused Set Top Products include a wideband analog-to-digital converter (ADC) configured to digitize a contiguous band of frequencies in an input signal, wherein the contiguous band of frequencies comprises a plurality of desired channels and a plurality of undesired channels as described below.</p> <p>Specifically, the Arris AX013ANM, depicted in the following annotated photograph, constitutes a cable television device as claimed.</p> 

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		<p>The Arris AX013ANM has applicable circuitry and/or software modules constituting a wide-band ADC. The Arris AX013ANM digitally tunes and outputs television content using its applicable circuitry and/or software modules, for example applicable circuitry and/or software modules located in the Broadcom BCM33843 Full-Band Capture SoC, highlighted in red above. The Arris AX013ANM has full band capture digital tuning technology and remote diagnostics that directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere. The entire downstream spectrum includes a plurality of desired channels and a plurality of undesired channels.</p> <p>“The new BCM3384 DOCSIS®/Euro-DOCSIS™ 3.0 cable gateway SoC combines Broadcom's Full-Band Capture (FBC) digital tuning technology with remote diagnostics, dual-band concurrent Wi-Fi, a custom, dedicated applications processor and integrated DECT 6.0 CAT-iq 2.0. ... Broadcom’s new BCM33843 is pin compatible ... Broadcom is now sampling [as of Jan 08, 2013] the BCM3384 and BCM33843” (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002036)</p> <p>“Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere. Remote diagnostics provides real time, unobtrusive diagnostic and spectrum analysis capabilities, without effecting user service on any of the 24 downstream channels.” (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)</p> <p>Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed method. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.</p>

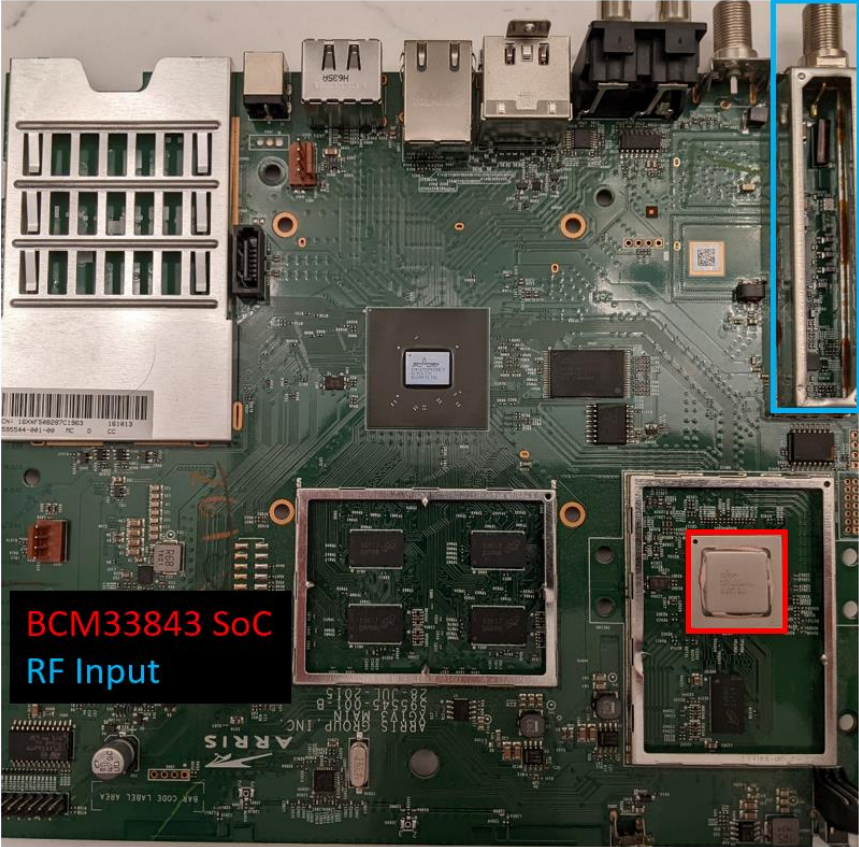
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#	U.S. Patent No. 11,381,866	Accused Products and Services
27b	<p>a digital frontend (DFE) coupled to the wideband ADC, wherein the DFE is configured to concurrently select and provide each of the plurality of desired channels without providing any of the plurality of undesired channels, and wherein the cable TV device comprises a digital video recorder (DVR).</p>	<p>The Accused Set Top Products include a digital frontend (DFE) coupled to the wideband ADC, wherein the DFE is configured to concurrently select and provide each of the plurality of desired channels without providing any of the plurality of undesired channels, and wherein the cable TV device comprises a digital video recorder (DVR) as described below.</p> <p>Specifically, the Arris AX013ANM has applicable circuitry and/or software modules constituting a digital frontend that concurrently selects and provides each of the plurality of desired channels without providing any of the plurality of undesired channels. The Arris AX013ANM has applicable circuitry and/or software modules, for example including applicable circuitry and/or software modules located in the BCM33843 SoC, constituting a digital frontend and providing full band capture digital tuning technology that directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere. The Arris AX013ANM is a DVR that can record approximately 150 total hours of HD programming on its hard drive.</p> <p>Full-Band Capture Digital Tuner Architecture</p>  <p>(ENTROPIC_COMCAST_002029 at ENTROPIC_COMCAST_002031)</p> <p>“Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere. Remote diagnostics provides real time, unobtrusive</p>

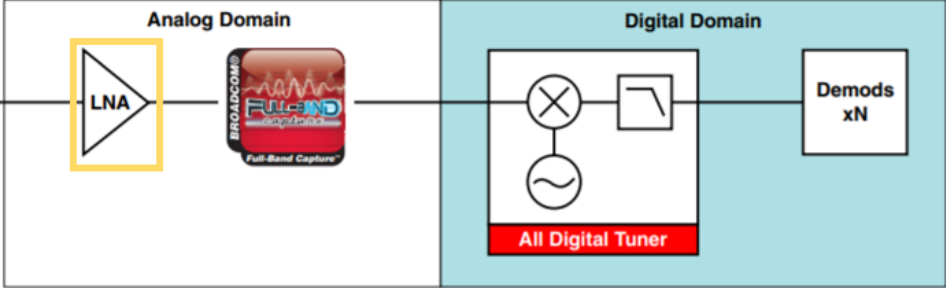
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#	U.S. Patent No. 11,381,866	Accused Products and Services
		<p>diagnostic and spectrum analysis capabilities, without effecting user service on any of the 24 downstream channels.” (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)</p> <p>“Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned and users can enjoy the experience of Broadcom's FastRTV™ fast channel change technology.” (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)</p> <p>“Storage Capacity: Currently, your X1 DVR can record approximately 150 total hours of HD programming on the hard drive.” (ENTROPIC_COMCAST_002961 at ENTROPIC_COMCAST_002963)</p> <p>Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed method. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.</p>
28pre	28. The cable TV device of claim 27, wherein:	See 27pre.
28a	the cable TV device comprises a cable network connector, and	<p>The cable TV device comprises a cable network connector as described below.</p> <p>Specifically, the Arris AX013ANM has a cable network connector, shown in blue in the following annotated photograph.</p>

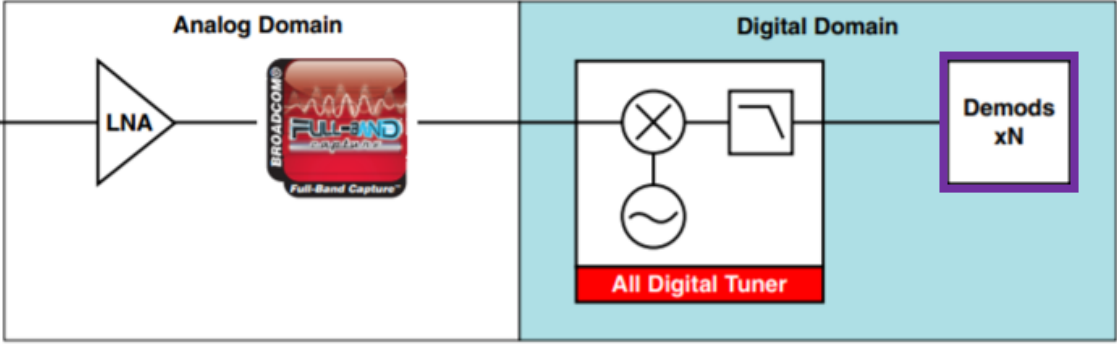
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#	U.S. Patent No. 11,381,866	Accused Products and Services
		 <p>BCM33843 SoC RF Input</p>
28b	<p>the input signal is operably communicated from the cable network connector to the wideband ADC via at least one of an analog amplifier and an analog filter.</p>	<p>The input signal is operably communicated from the cable network connector to the wideband ADC via at least one of an analog amplifier and an analog filter as described below.</p> <p>Specifically, the Arris AX013ANM has applicable circuitry and/or software modules constituting at least an analog amplifier. For example, the Arris AX013ANM, via applicable circuitry and/or software modules of its BCM33843 SoC, has at least an analog amplifier, highlighted in yellow below.</p>

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#	U.S. Patent No. 11,381,866	Accused Products and Services
		<p>Full-Band Capture Digital Tuner Architecture</p>  <p>(ENTROPIC_COMCAST_002029 at ENTROPIC_COMCAST_002031, annotated)</p> <p>Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed method. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.</p>
33pre	33. The cable TV device of claim 27, wherein:	See 27pre.
33a	the DFE comprises a plurality of digital demodulators, and	<p>The DFE comprises a plurality of digital demodulators as described below.</p> <p>Specifically, the Arris AX013ANM has applicable circuitry and/or software modules constituting a plurality of demodulators. For example, the Arris AX013ANM, via applicable circuitry and/or software modules of its BCM33843 SoC, has a plurality of demodulators, highlighted in purple below.</p>

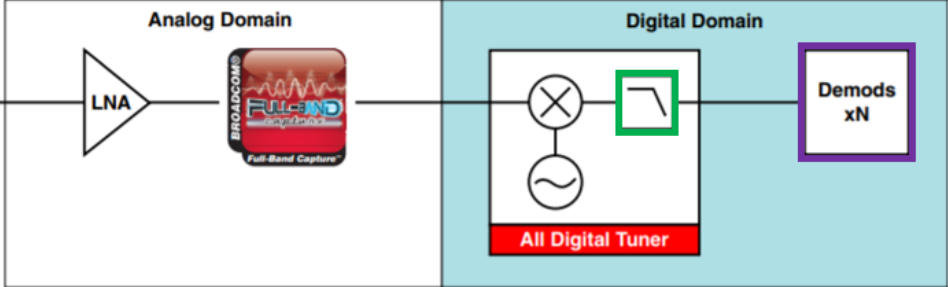
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#	U.S. Patent No. 11,381,866	Accused Products and Services
		<p>Full-Band Capture Digital Tuner Architecture</p>  <p>(ENTROPIC_COMCAST_002029 at ENTROPIC_COMCAST_002031, annotated)</p> <p>Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed method. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.</p>
33b	each digital demodulator, of the plurality of digital demodulators, is operable to demodulate a desired channel, of the plurality of desired channels.	<p>Each digital demodulator, of the plurality of digital demodulators, is operable to demodulate a desired channel, of the plurality of desired channels as described below.</p> <p>Specifically, the Arris AX013ANM has applicable circuitry and/or software modules constituting a plurality of demodulators. For example, the Arris AX013ANM, via applicable circuitry and/or software modules of its BCM33843 SoC, has a plurality of demodulators, highlighted in purple below. The demodulators demodulate the desired channels.</p> <p>“Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere. Remote diagnostics provides real time, unobtrusive</p>

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		<p>diagnostic and spectrum analysis capabilities, without effecting user service on any of the 24 downstream channels.” (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)</p> <p>“Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned and users can enjoy the experience of Broadcom's FastRTV™ fast channel change technology.” (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)</p> <p>Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed method. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.</p>
36	36. The cable TV device of claim 27, wherein: the DFE is operable to provide the plurality of desired channels via a serial interface.	<p>The DFE is operable to provide the plurality of desired channels via a serial interface as described below.</p> <p>More specifically, the Arris AX013ANM, using its applicable circuitry and/or software modules, outputs the digital datastream from a filter to one or more demodulators. On informed belief, the digital datastream is output via a serial interface. For example and on informed belief, the Arris AX013ANM, using applicable circuitry and/or software modules contained in the BCM33843 Full-Band Capture SoC, outputs the digital datastream from the filter (highlighted below in green) to the demodulators (highlighted below in purple) via a serial interface.</p>

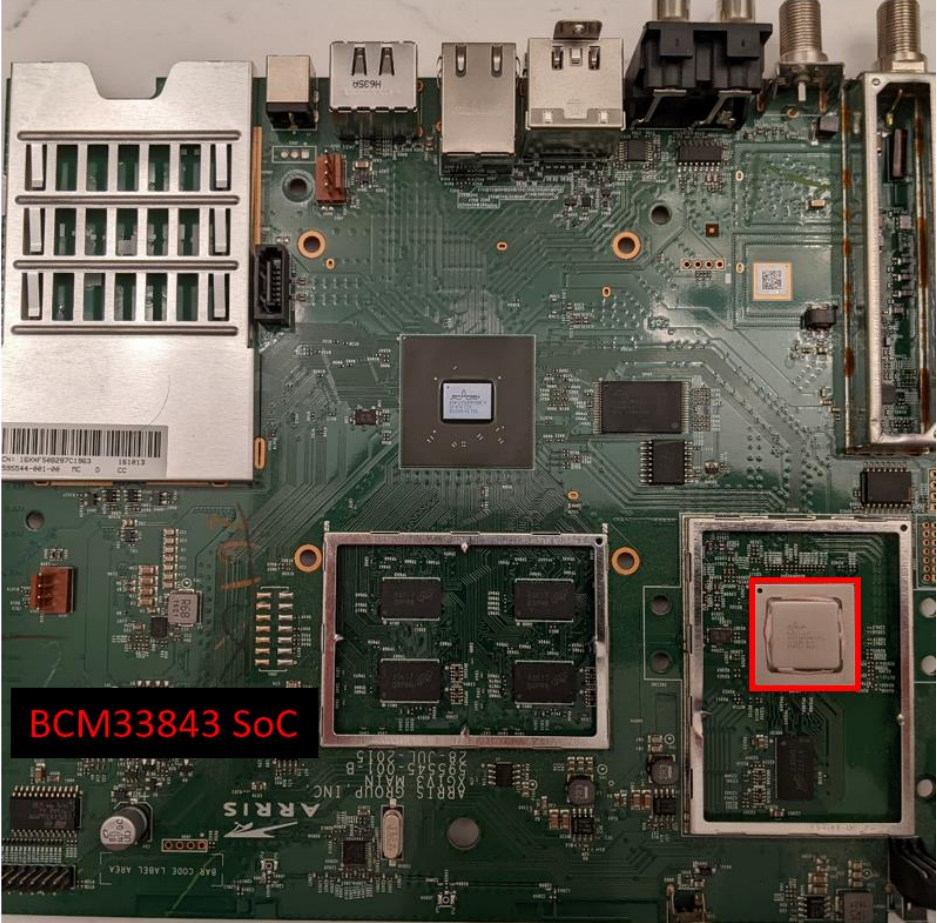
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#	U.S. Patent No. 11,381,866	Accused Products and Services
		<p>Full-Band Capture Digital Tuner Architecture</p>  <p>(ENTROPIC_COMCAST_002029 at ENTROPIC_COMCAST_002031, annotated)</p> <p>Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed method. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.</p>
37	37. The cable TV device of claim 27, wherein: the plurality of desired channels comprises at least one cable broadcast channel.	<p>The plurality of desired channels comprises at least one cable broadcast channel as described below.</p> <p>Specifically, the Arris AX013ANM provides cable television services, including viewing and recording of desired television content. The plurality of desired channels includes at least this desired television content, which constitutes at least one cable broadcast channel.</p> <p>“Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere. Remote diagnostics provides real time, unobtrusive diagnostic and spectrum analysis capabilities, without effecting user service on any of the 24 downstream channels.”</p>

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#	U.S. Patent No. 11,381,866	Accused Products and Services
		<p>(ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)</p> <p>“Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned and users can enjoy the experience of Broadcom's FastRTV™ fast channel change technology.”</p> <p>(ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)</p> <p>“Storage Capacity: Currently, your X1 DVR can record approximately 150 total hours of HD programming on the hard drive.”</p> <p>(ENTROPIC_COMCAST_002961 at ENTROPIC_COMCAST_002963)</p> <p>Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed method. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.</p>
41pre	41. A cable TV device comprising:	The Accused Services utilize the claimed cable TV device by using, for example, the Accused Set Top Products, which include at least one set top box (“STB”) located at each sub-scriber location, including, for example, the Arris AX013ANC STB, Arris AX013ANM STB, Arris AX014ANC STB, Arris AX014ANM STB, Arris MX011ANC STB, Arris MX011ANM STB, Pace PX013ANC STB, Pace PX013ANM STB, Pace PX022ANC STB, Pace PX022ANM STB, Samsung SX022ANC STB, Samsung SX022ANM STB, and products that operate in a similar manner. By way of example, the Arris AX013ANM is charted herein.
41a	a wideband analog-to-digital converter (ADC) configured to digitize an input signal, wherein the input signal comprises a plurality of	The Accused Set Top Products include a wideband analog-to-digital converter (ADC) configured to digitize an input signal, wherein the input signal comprises a plurality of desired channels and a plurality of undesired channels as described below.

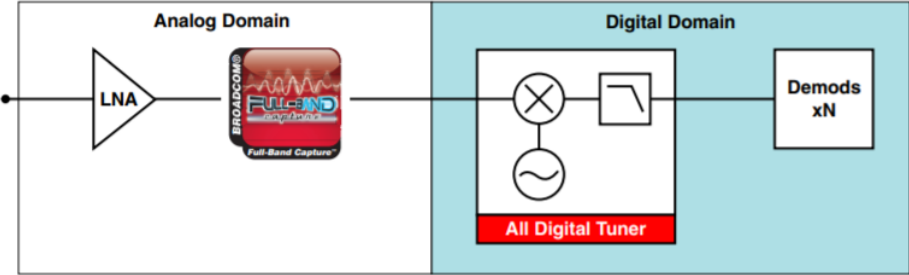
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	<p>desired channels and a plurality of undesired channels; and</p>	<p>Specifically, the Arris AX013ANM, depicted in the following annotated photograph, constitutes a cable television device as claimed.</p> 

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		<p>The Arris AX013ANM has applicable circuitry and/or software modules constituting a wide-band ADC. The Arris AX013ANM digitally tunes and outputs television content using its applicable circuitry and/or software modules, for example applicable circuitry and/or software modules located in the Broadcom BCM33843 Full-Band Capture SoC, highlighted in red above. The Arris AX013ANM has full band capture digital tuning technology and remote diagnostics that directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere. The entire downstream spectrum includes a plurality of desired channels and a plurality of undesired channels.</p> <p>“The new BCM3384 DOCSIS®/Euro-DOCSIS™ 3.0 cable gateway SoC combines Broadcom's Full-Band Capture (FBC) digital tuning technology with remote diagnostics, dual-band concurrent Wi-Fi, a custom, dedicated applications processor and integrated DECT 6.0 CAT-iq 2.0. ... Broadcom’s new BCM33843 is pin compatible ... Broadcom is now sampling [as of Jan 08, 2013] the BCM3384 and BCM33843” (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002036)</p> <p>“Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere. Remote diagnostics provides real time, unobtrusive diagnostic and spectrum analysis capabilities, without effecting user service on any of the 24 downstream channels.” (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)</p> <p>Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed method. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.</p>

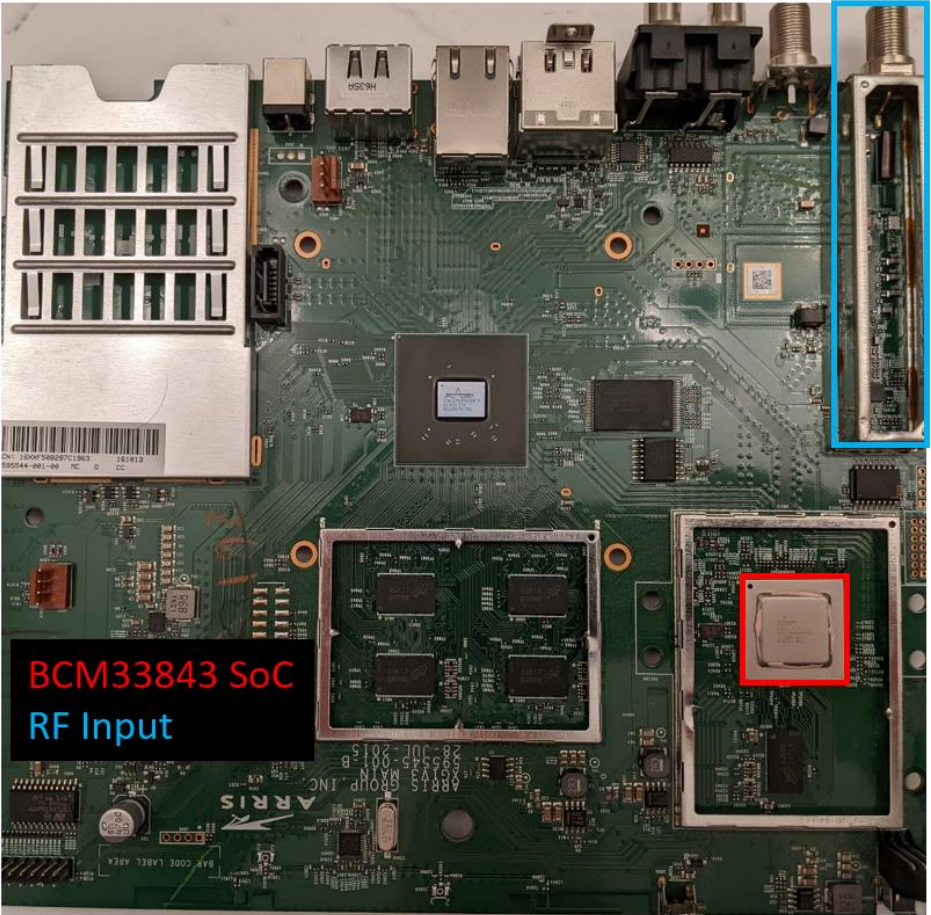
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#	U.S. Patent No. 11,381,866	Accused Products and Services
41b	<p>a plurality of digital down converters coupled to the wideband ADC, wherein each digital down converter, of the plurality of digital down converters, is operable to generate a digital channel output corresponding to each desired channel, of the plurality of desired channels, and wherein the cable TV device comprises a digital video recorder (DVR).</p>	<p>The Accused Set Top Products include a plurality of digital down converters coupled to the wideband ADC, wherein each digital down converter, of the plurality of digital down converters, is operable to generate a digital channel output corresponding to each desired channel, of the plurality of desired channels, and wherein the cable TV device comprises a digital video recorder (DVR) as described below.</p> <p>Specifically, the Arris AX013ANM has applicable circuitry and/or software modules constituting a plurality of digital down converters coupled to the wideband ADC. The Arris AX013ANM has applicable circuitry and/or software modules, for example including applicable circuitry and/or software modules located in the BCM33843 SoC, providing full band capture digital tuning technology that directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere. On informed belief, at least this applicable circuitry and/or software modules of the Arris AX013ANM constitutes digital down converters operable to generate a digital channel output corresponding to each desired channel, of the plurality of desired channels. The Arris AX013ANM is a DVR that can record approximately 150 total hours of HD programming on its hard drive.</p> <p>Full-Band Capture Digital Tuner Architecture</p>  <p>(ENTROPIC_COMCAST_002029 at ENTROPIC_COMCAST_002031)</p>

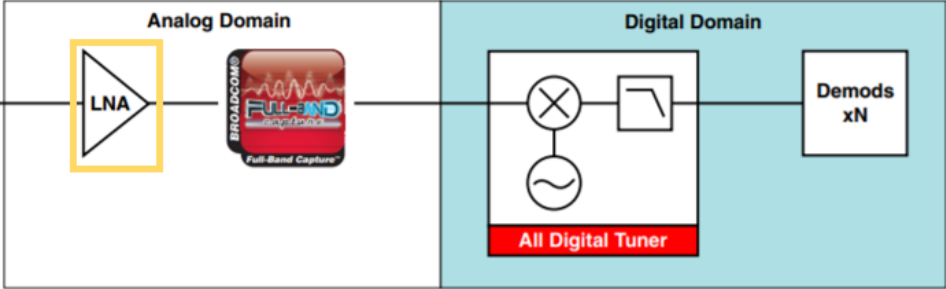
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#	U.S. Patent No. 11,381,866	Accused Products and Services
		<p>“Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere. Remote diagnostics provides real time, unobtrusive diagnostic and spectrum analysis capabilities, without effecting user service on any of the 24 downstream channels.” (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)</p> <p>“Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned and users can enjoy the experience of Broadcom's FastRTV™ fast channel change technology.” (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)</p> <p>“Storage Capacity: Currently, your X1 DVR can record approximately 150 total hours of HD programming on the hard drive.” (ENTROPIC_COMCAST_002961 at ENTROPIC_COMCAST_002963)</p> <p>Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed method. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.</p>
42pre	42. The cable TV device of claim 41, wherein:	See 41pre.
42a	the cable TV device comprises a cable network connector, and	<p>The cable TV device comprises a cable network connector as described below.</p> <p>Specifically, the Arris AX013ANM has a cable network connector, shown in blue in the following annotated photograph.</p>

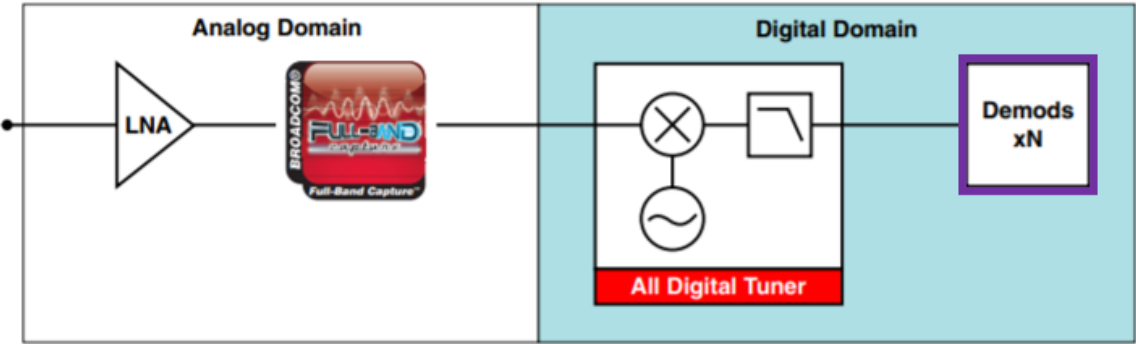
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#	U.S. Patent No. 11,381,866	Accused Products and Services
		 <p>BCM33843 SoC RF Input</p>
42b	the input signal is operably communicated from the cable network connector to the wideband ADC via at least one of an analog amplifier and an analog filter.	<p>The input signal is operably communicated from the cable network connector to the wideband ADC via at least one of an analog amplifier and an analog filter as described below.</p> <p>Specifically, the Arris AX013ANM has applicable circuitry and/or software modules constituting at least an analog amplifier. For example, the Arris AX013ANM, via applicable circuitry</p>

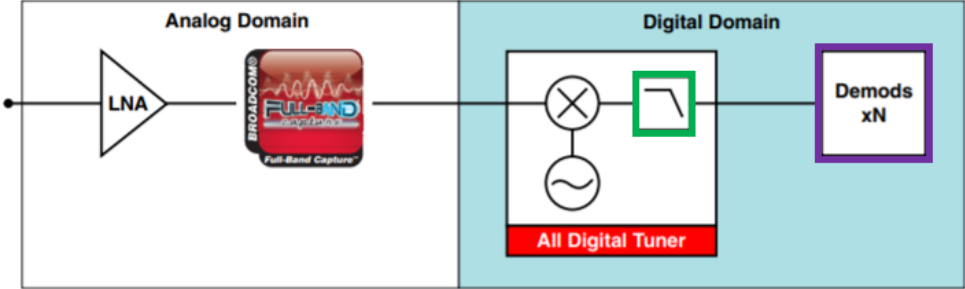
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#	U.S. Patent No. 11,381,866	Accused Products and Services
		<p>and/or software modules of its BCM33843 SoC, has at least an analog amplifier, highlighted in yellow below.</p> <p>Full-Band Capture Digital Tuner Architecture</p>  <p>(ENTROPIC_COMCAST_002029 at ENTROPIC_COMCAST_002031, annotated)</p> <p>Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed method. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.</p>
47	<p>47. The cable TV device of claim 41, wherein: each digital down converter comprises a digital demodulator operable to demodulate a desired channel, of the plurality of desired channels, to provide a demodulated channel as the digital channel output.</p>	<p>Each digital down converter comprises a digital demodulator operable to demodulate a desired channel, of the plurality of desired channels, to provide a demodulated channel as the digital channel output as described below.</p> <p>Specifically, the Arris AX013ANM has applicable circuitry and/or software modules constituting a plurality of demodulators. For example, the Arris AX013ANM, via applicable circuitry and/or software modules of its BCM33843 SoC, has a plurality of demodulators, highlighted in purple below. The demodulators demodulate the desired channels and provide the demodulated channel as the digital channel output.</p>

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#	U.S. Patent No. 11,381,866	Accused Products and Services
		<p data-bbox="762 289 1524 326">Full-Band Capture Digital Tuner Architecture</p>  <p data-bbox="726 695 1801 732">(ENTROPIC_COMCAST_002029 at ENTROPIC_COMCAST_002031, annotated)</p> <p data-bbox="726 781 1944 979">“Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere. Remote diagnostics provides real time, unobtrusive diagnostic and spectrum analysis capabilities, without effecting user service on any of the 24 downstream channels.”</p> <p data-bbox="726 992 1661 1029">(ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)</p> <p data-bbox="726 1078 1944 1235">“Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned and users can enjoy the experience of Broadcom's FastRTV™ fast channel change technology.”</p> <p data-bbox="726 1248 1661 1286">(ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)</p> <p data-bbox="726 1334 1944 1404">Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the</p>

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		claimed method. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.
50	50. The cable TV device of claim 41, wherein: the plurality of digital down converters is operable to provide each digital channel output via a serial interface.	<p>The plurality of digital down converters are operable to provide each digital channel output via a serial interface as described below.</p> <p>More specifically, the Arris AX013ANM, using its applicable circuitry and/or software modules, outputs a digital datastream from a filter to one or more demodulators. On informed belief, the digital datastream is output via a serial interface. For example and on informed belief, the Arris AX013ANM, using applicable circuitry and/or software modules contained in the BCM33843 Full-Band Capture SoC, outputs the digital datastream from the filter (highlighted below in green) to the demodulators (highlighted below in purple) via a serial interface.</p> <p>Full-Band Capture Digital Tuner Architecture</p>  <p>(ENTROPIC_COMCAST_002029 at ENTROPIC_COMCAST_002031, annotated)</p> <p>Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed method. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.</p>

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51	51. The cable TV device of claim 41, wherein: the plurality of desired channels comprises at least one cable broadcast channel.	<p>The plurality of desired channels comprises at least one cable broadcast channel as described below.</p> <p>Specifically, the Arris AX013ANM provides cable television services, including viewing and recording of desired television content. The plurality of desired channels includes at least this desired television content, which constitutes at least one cable broadcast channel.</p> <p>“Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere. Remote diagnostics provides real time, unobtrusive diagnostic and spectrum analysis capabilities, without effecting user service on any of the 24 downstream channels.” (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)</p> <p>“Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned and users can enjoy the experience of Broadcom's FastRTV™ fast channel change technology.” (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)</p> <p>“Storage Capacity: Currently, your X1 DVR can record approximately 150 total hours of HD programming on the hard drive.” (ENTROPIC_COMCAST_002961 at ENTROPIC_COMCAST_002963)</p> <p>Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the</p>

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		claimed method. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.